

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number
WO 2004/022676 A1

- (51) International Patent Classification⁷: **C10M 125/26**
- (21) International Application Number:
PCT/SE2003/001366
- (22) International Filing Date:
8 September 2003 (08.09.2003)
- (25) Filing Language: Swedish
- (26) Publication Language: English
- (30) Priority Data:
0202659-9 9 September 2002 (09.09.2002) SE
0302070-8 14 July 2003 (14.07.2003) SE
- (71) Applicant (for all designated States except US): **EAGLE WATER LTD.** [—/—]; Box 122, Helvetia Court South Esplanade, St. Peter Port, Guernsey Channel Islands GY1 4EE (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **SELIN, Mats** [SE/SE]; Karlavägen 30, S-172 76 Sundbyberg (SE).
- (74) Agent: **BJELKSTAM, Peter**; Bergenstråhle & Lindvall AB, Box 17704, S-118 93 Stockholm (SE).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: A METHOD FOR PRODUCING A SOLUTION HAVING LUBRICATING PROPERTIES INTENDED TO BE USED AS AN ADDITIVE TO A LIQUID

(57) Abstract: The present invention refers to a method for producing a solution having lubrication properties intended to be used preferably as an additive as a concentrate blended to a liquid, such as a liquid fuel. A boric compound such as boric acid and/or boric oxide is dissolved in a solvent and the borate ions are in a homogeneous phase together with the solvent, which as a solution in stable conditions is made to have a high concentration of borate thanks to the hydrogen bonds counter action to the electro negativity of the boric compound and its tendency to covalent bonding, the solution being used as an additive to the actual liquid, which in this way receive friction reducing, lubricating and corrosion inhibiting characteristics.

WO 2004/022676 A1